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2 WHAT IS CLAIMED IS:

Sub A1

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1. A game controller for communicating between a user and an electronic

5 game device, comprising:

6 a housing;

7 a sensor attached to said housing and responsive to operation by the
8 user to generate signals;

9 a radio frequency sender engaged with said sensor, wherein said sender
10 is capable of time domain multiplexed transmission of said signals; and

11 a radio frequency receiver engaged with the electronic game device for
12 receiving the signals from said radio frequency sender.

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14 2. A game controller as recited in Claim 1, wherein said radio frequency
15 receiver is attached to the electronic game device.

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17 3. A game controller as recited in Claim 1, wherein said radio frequency
18 receiver is capable of transmitting signals from the electronic game device to
19 said radio frequency sender.

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21 4. A game controller as recited in Claim 3, wherein said sensor is
22 engaged with said radio frequency sender for detecting signals transmitted by
23 said radio frequency sender.

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25 5. A game controller as recited in Claim 1, wherein said radio frequency
26 sender is capable of being turned off when said signals are not being
27 transmitted.

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29 6. A game controller as recited in Claim 1, wherein said radio frequency
30 sender is capable of transmitting said signals in a plurality of discrete time
31 intervals.

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33 7. A game controller as recited in Claim 1, wherein said signals are
34 transmitted at a frequency equal to or greater than 300 MHz.

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36 *Sul az* 8. A game controller system for communicating between at least two
37 users and an electronic game device, comprising:
38 a housing;
39 at least two sensors engaged with said housing and responsive to
40 operation by the persons to generate signals;
41 a radio frequency sender engaged with said sensors, wherein said sender
42 is capable of time domain multiplexed transmission of said signals; and
43 a radio frequency receiver engaged with the electronic game device for
44 receiving the signals from said radio frequency sender.

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46 9. A game controller system as recited in Claim 8, wherein each sensor is
 47 attached to a separate housing and is further engaged with said radio frequency
 48 sender.

49 Sub A3
 50 10. A game controller system as recited in Claim 8, wherein said sensor
 51 and said receiver share a common address transmitted as one of said signals.
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53 11. A game controller system as recited in Claim 8, wherein one or more
 54 of said radio frequency senders are capable of transmitting signals to one or
 55 more radio frequency receivers each engaged with a different electronic game
 56 device.
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58 12. A game controller system as recited in Claim 8, wherein said receiver
 59 is capable of receiving signals from at least two radio frequency senders
 60 operating on different channels.

61 Sub A4
 62 13. A game controller system as recited in Claim 8, wherein said receiver
 63 is capable of receiving signals from at least two radio frequency senders
 64 operating on the same channel.
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67 14. A method for communicating between a user and an electronic game
 68 device, comprising:
 69 operating a sensor engaged with a housing to generate signals in
 70 response to operation by the user;
 71 detecting said signals with a radio frequency sender engaged with said
 72 sensor;
 73 operating said radio frequency sender to transmit said signals with time
 74 domain multiplexing; and
 75 receiving said radio frequency sender signals with a radio frequency
 76 receiver engaged with the electronic game device.

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 78 15. A method as recited in Claim 14, further comprising the steps of
 79 operating a second sensor engaged with said housing to generate a signals in
 80 response to operation by a second user, and of detecting said signals with said
 81 radio frequency sender for transmission to said radio frequency receiver.

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 83 16. A method as recited in Claim 14, further comprising the steps of
 84 operating a second sensor engaged with a second housing to generate signals
 85 in response to operation by a second user, of detecting said signals with a
 86 second radio frequency sender engaged with said second sensor, of transmitting
 87 said signals with said radio frequency sender, and of receiving said second radio
 88 frequency sender signals with said radio frequency receiver.

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90 17. A method as recited in Claim 14, further comprising the steps of
91 transmitting signals from said radio frequency receiver and of receiving said
92 radio frequency receiver signals with said radio frequency sender.

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94 18. A method as recited in Claim 14, further comprising the step of
95 transmitting the signals in a plurality of discrete time periods interrupted by
96 periods where no transmission occurs.

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98 19. A method as recited in Claim 14, further comprising the step of
99 transmitting signals between said radio frequency sender and said radio
100 frequency receiver which comprise an address for connecting said sender and
101 receiver.

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